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E7.3 10548.

CR-131652

SR No. 031

MARSHES AND TURBID WATERS
IN THE FRENCH ATLANTIC LITTORAL

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May 1973

Type I Report for period
March-April 1973

CENTRE NATIONAL D'ETUDES SPATIALES
129 rue de l'Université
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(E73-10548) MARSHES AND TURBID WATERS
IN THE FRENCH ATLANTIC LITTORAL
Progress Report, Mar. - Apr. 1973 (Ecole
Pratique des Hautes Etudes) 4 p HC
\$3.00
N73-22307
Unclas
00548
CSCL 08H G3/13

1. SR No. 031	2. Type of Report 1	3. Recipient's Catalog No.
4. Title <i>MARSHES AND TURBID WATERS</i>		5. Report Date May 1973
		6. Period Covered March - April 1973
7. Principal Investigator <i>Dr Fernand VERGER</i>		8. No of Pages 3
9. Name and Address of Principal Investigator's Organization <i>Ecole Pratique des Hautes Etudes 61 rue Buffon 75005 - PARIS. France</i>		10. Principal Investigat. Rept. No 3
		11. GSFC Technical Monitor <i>ENSOR, GEORGE J.</i>
12. Sponsoring Agency Name and Address <i>Centre National d'Etudes Spatiales 129 rue de l'Université 75007 - PARIS. France</i>		13. Key Words (Selected by Principal Investigator) Tidal marsh; littoral transport, estuary, beaches; wetlands.
14. Supplementary Notes prepared in cooperation with H. Kadiri and R. Regrain. Translated by Ann Wellington.		
15. Abstract <p>Since the preceding type 2 report of February 28 1973, we have received an image in positive transparency from sept. 27, 1973, (1066-10291) as well as the computer compatible tapes of the image 1066-10294.</p> <p>The following operations have been performed :</p> <ul style="list-style-type: none"> - examination with a multispectral viewer. - microdensitometry. - enhancement and photographic enlargement. <p>The work on the bands has been begun: establishment of histograms of frequency of the energy levels picked up in each spectral band, establishment of profiles, preparation of a program of cartography.</p>		

(I) - OBJECTIVES.

The objective of this project is to conduct studies on the alluvial zones of the French Atlantic littoral at a taxonomic scale which can bring out the generalization concerning the nature of those sediments and geomorphic forms; an objective which only orbital photographs make possible. A synthesis of the data obtained from the research work already carried out over a number of years on the very same areas by the principal investigator and the co-investigators, is sought, as well as the establishment of a correlation with the new data provided by ERTS-1. It will be however desirable to obtain the largest possible series as much for the study of turbidity of plumes which change according to the tides, as for the study of alluvial plains, showing seasonal phases. The phenomena studied present a very rapid evolution which has been the principal subject of research carried out until now. A better overall understanding of these alluvial zones and the origin of the sedimentary forms shall not be limited to theoretical interest alone, but shall have possibilities of practical applications in numerous fields like agriculture, shell fish breeding and coastal management.

(II) - ACCOMPLISHMENTS.

Since the preceding Type 2 report of February 28, 1973, we have received an image in positive transparency from sept. 27, 1973 (1066-10291) as well as the computer compatible tapes of the image 1066-10294.

The following operations have been performed :

- a) - establishment of isoluminous images and examination with multi-spectral viewer.
- b) - photographic enhancement and enlargement.
- c) - study of multispectral scanner imagery by isodensitometric areas.
- d) - study of multispectral scanner imagery by microdensitometry.
- e) - beginning of treatment of SYCI-MSS data of the image 1066-10294 and establishment of the histograms of frequency of the energy levels.

(III) - RESULTS.

The results obtained concern the sedimentary transport in the bay of Bourgneuf, the bay of Mont St-Michel, and the estuary of the Loire. Unfortunately the number of exploitable images (14 received images) is reduced to 3 for the program under consideration, due to the presence and the localisation of the clouds. In general we have at our disposal only one tide situation (low tide for 1066-10294) for each littoral sector under study.

ERTS IMAGE DESCRIPTOR FORM

(See Instructions on Back)

DATE 4 /28/73

PRINCIPAL INVESTIGATOR Dr Fernand VERGER

GSFC F-0429

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PRODUCT ID (INCLUDE BAND AND PRODUCT)	FREQUENTLY USED DESCRIPTORS*			DESCRIPTORS
	littoral transport	tidal flat	coastal marsh	
1066 10291 4	EEO	✓	✓	Shallow Water ; Mud Flat; Inshore Zone ; Advancing Shoreline ; Salt Marsh ; Coastal Dune ; Dam ; Harbor.
1066 10291 5	EEO	✓	✓	Shallow Water ; Mud Flat; Inshore Zone ; Advancing Shoreline ; Salt Marsh ; Coastal Dune ; Dam ; Har- bor.
1066 10291 6	✓	✓	EEO	Shallow Water ; Mud Flat; Coast Line ; Harbor ; Dam.
1066 10291 7		✓	✓	Mud Flat ; Coast Line ; Harbor ; Dam.

*FOR DESCRIPTORS WHICH WILL OCCUR FREQUENTLY, WRITE THE DESCRIPTOR TERMS IN THESE COLUMN HEADING SPACES NOW AND USE A CHECK (✓) MARK IN THE APPROPRIATE PRODUCT ID LINES. (FOR OTHER DESCRIPTORS, WRITE THE TERM UNDER THE DESCRIPTORS COLUMN).

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